What is calimed is:

1. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film having a water absorption of 1.5% by volume or less.

2. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film having a saturation moisture absorption of 1.0% by volume or less.

3. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film having a residual volatile component in an

amount not more than 3.0% by weight.

4. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film having a modulus of elasticity of 10 MPa or less at a temperature of 250 °C.

5. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film having, at the stage where the semiconductor chip has been bonded to the support member, a void volume of 10% or less in terms of voids present in the die-bonding material and at the interface between the die-bonding material and the support member.

6. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin

encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film having a peel strength of 0.5 Kgf/5 × 5 mm chip or above at the stage where the semiconductor chip has been bonded to the support member.

7. A semiconductor device comprising a support member, a semiconductor chip, a die-bonding material for attaching the semiconductor chip to the support member, and a resin encapsulant member for encapsulating the semiconductor chip, wherein:

said die-bonding material is a film containing an organic matter; said film i) having a planar dimension not larger than the planar dimension of the semiconductor chip, and ii) not protruding outward from the region of the semiconductor chip at the stage where the semiconductor chip has been bonded to the support member.

8. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin:

said attaching being carried out with a filmy die-bonding material containing an organic matter; said filmy die-bonding material having a water absorption of 1.5% by volume or less.

9. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with a filmy die-bonding material containing an organic matter; said filmy die-bonding material having a saturation moisture absorption of 1.0% by volume or less.

10. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with a filmy die-bonding material containing an organic matter; said filmy die-bonding material having a residual volatile component in an amount not more than 3.0% by weight.

11. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with a filmy die-bonding material containing an organic matter; said filmy die-bonding material having a modulus of elasticity of 10 MPa or less at a

temperature of 250 °C.

12. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with a filmy die-bonding material containing an organic matter; said filmy die-bonding material having, at the stage where the semiconductor chip has been bonded to the support member, a void volume of 10% or less in terms of voids present in the die-bonding material and at the interface between the die-bonding material and the support member.

13. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with die-bonding material comprising a filmy die-bonding material containing an organic matter; said filmy die-bonding material having a peel strength of 0.5 kgf/5 × 5 mm chip or above at the stage where the semiconductor chip has been bonded to the support member.

14. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a

support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with a filmy die-bonding material containing an organic matter; said filmy die-bonding material i) having a planar dimension not larger than the planar dimension of the semiconductor chip, and ii) not protruding outward from the region of the semiconductor chip at the stage where the semiconductor chip has been bonded to the support member.

15. A process for fabricating a semiconductor device, comprising the steps of attaching a semiconductor chip to a support member, and encapsulating the semiconductor chip with a resin;

said attaching being carried out with a filmy die-bonding material containing an organic matter;

the process further comprising the steps of

mounting said semiconductor chip on said filmy die-bonding material; and

attaching said semiconductor chip to said filmy die-bonding material under conditions of a temperature of 150°C to 250°C, bonding time of 0.1 (inclusive) second to 2 seconds, and a pressure of 0.1 to 4 gf/mm^2.

16. A process for fabricating a semiconductor device, according to any one of claims 8 to 13 and 14, further comprising

the steps of

mounting said semiconductor chip on said filmy die-bonding material; and

attaching said semiconductor chip to said filmy die-bonding material under conditions of a temperature of 150°C to 250°C, bonding time of 0.1 (inclusive) second to 2 seconds, and a pressure of 0.1 to 4 gf/mm^2.